

8-29-02

gerstl - 09 / 923198

Page 1

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:39:14 ON 29 AUG 2002

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STRUCTURE FILE UPDATES: 27 AUG 2002 HIGHEST RN 445218-02-0

DICTIONARY FILE UPDATES: 27 AUG 2002 HIGHEST RN 445218-02-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

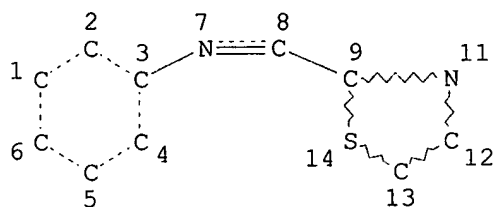
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d sta que 110

L1 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

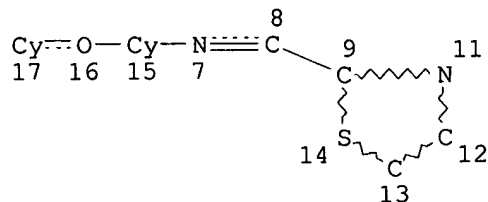
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L3 SCR 2004 AND 1840

L5 195 SEA FILE=REGISTRY SSS FUL L1 AND L3

L6 STR



NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L8 8 SEA FILE=REGISTRY SUB=L5 SSS FUL L6

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

L9 3 SEA FILE=REGISTRY ABB=ON PLU=ON L8 AND (C26H20N4O2S OR
C31H23N5O3S2 OR C28H18N4OS4)
L10 5 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT L9

=> d his l10-

(FILE 'REGISTRY' ENTERED AT 09:33:22 ON 29 AUG 2002)
L10 5 S L8 NOT L9

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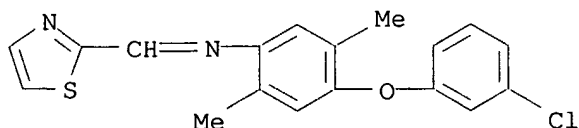
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L12 2 S L10

FILE 'USPATFULL, USPAT2' ENTERED AT 09:38:57 ON 29 AUG 2002
L13 1 S L10

FILE 'REGISTRY' ENTERED AT 09:39:14 ON 29 AUG 2002

=> d l10 ide can tot

L10 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN 395663-58-8 REGISTRY
CN Benzenamine, 4-(3-chlorophenoxy)-2,5-dimethyl-N-(2-thiazolylmethylene)-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H15 Cl N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



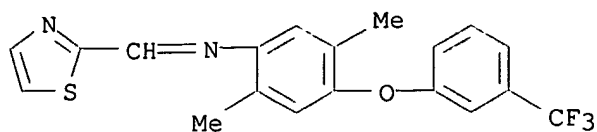
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2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:183603

REFERENCE 2: 136:150990

L10 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN 395663-57-7 REGISTRY
CN Benzenamine, 2,5-dimethyl-N-(2-thiazolylmethylene)-4-[3-(trifluoromethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H15 F3 N2 O S
SR CA
LC STN Files: CA, CA, USPATFULL



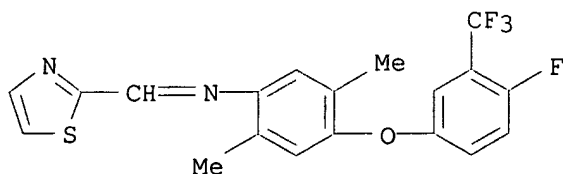
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:183603

REFERENCE 2: 136:150990

L10 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN 395663-56-6 REGISTRY
CN Benzenamine, 4-[4-fluoro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H14 F4 N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



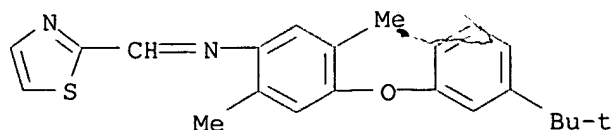
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:183603

REFERENCE 2: 136:150990

L10 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN 395663-55-5 REGISTRY
CN Benzenamine, 4-[3-(1,1-dimethylethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H24 N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



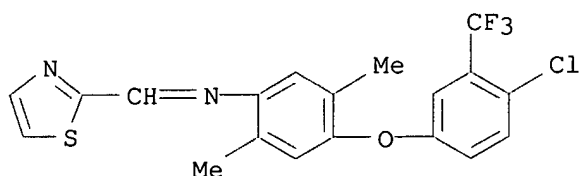
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:183603

REFERENCE 2: 136:150990

L10 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN 395663-54-4 REGISTRY
CN Benzenamine, 4-[4-chloro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H14 Cl F3 N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:183603

REFERENCE 2: 136:150990

=> fil uspatall

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CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:39:28 ON 29 AUG 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr l13

L13 ANSWER 1 OF 1 USPATFULL
AN 2002:192097 USPATFULL
TI Fungicide phenylimine derivatives
IN Gerusz, Vincent, San Antonio, TX, UNITED STATES
Mansfield, Darren James, Lyon, FRANCE
Perez, Joseph, Lyon, FRANCE
Vors, Jean-Pierre, Lyon, FRANCE
PA Aventis CropScience S.A. (U.S. corporation)
PI US 2002103168 A1 20020801
AI US 2001-923198 A1 20010806 (9)
PRAI EP 2000-116819 20000804
DT Utility
FS APPLICATION
LREP OSTROLENK FABER GERB & SOFFEN, 1180 AVENUE OF THE AMERICAS, NEW YORK,
NY, 100368403

CLMN Number of Claims: 35

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 912

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides fungicidal compounds of formula I and salts thereof: ##STR1##

wherein

the various radicals and substituents are as defined in the description, fungicidal compositions containing them and method for combating fungi which comprises applying these.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

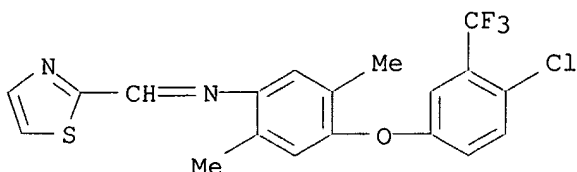
IT 395663-54-4P 395663-55-5P 395663-56-6P

395663-57-7P 395663-58-8P

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

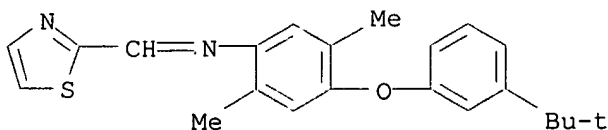
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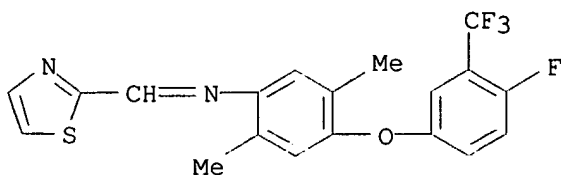
RN 395663-55-5 USPATFULL

CN Benzenamine, 4-[3-(1,1-dimethylethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



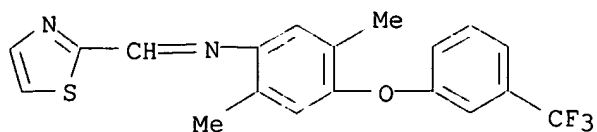
RN 395663-56-6 USPATFULL

CN Benzenamine, 4-[4-fluoro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)

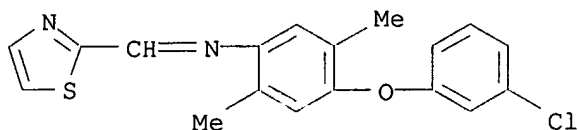


RN 395663-57-7 USPATFULL

CN Benzenamine, 2,5-dimethyl-N-(2-thiazolylmethylene)-4-[3-(trifluoromethyl)phenoxy]- (9CI) (CA INDEX NAME)



RN 395663-58-8 USPATFULL
 CN Benzenamine, 4-(3-chlorophenoxy)-2,5-dimethyl-N-(2-thiazolylmethylene)-
 (9CI) (CA INDEX NAME)



=> fil hcaplus
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FILE COVERS 1907 - 29 Aug 2002 VOL 137 ISS 9
 FILE LAST UPDATED: 27 Aug 2002 (20020827/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

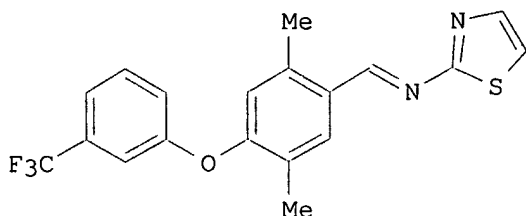
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L12 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
 AN 2002:138922 HCAPLUS
 DN 136:183603
 TI Preparation of N-(phenoxyphenyl)imines and analogs as agrochemical fungicides
 IN Gerusz, Vincent; Mansfield, Darren James; Perez, Joseph; Vors, Jean-Pierre
 PA Aventis Cropscience S.A., Fr.
 SO Eur. Pat. Appl., 28 pp.
 CODEN: EPXXDW
 DT Patent
 LA English

IC ICM C07C251-24
 ICS C07D277-28; C07D207-32; C07D213-53; C07D307-70; A01N035-10;
 A01N043-78; A01N043-36; A01N043-08; A01N043-40
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5

FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 1180512 | A1 | 20020220 | EP 2000-116819 | 20000804 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| EP 1178035 | A1 | 20020206 | EP 2001-420177 | 20010802 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002205979 | A2 | 20020723 | JP 2001-237025 | 20010803 |
| US 2002103168 | A1 | 20020801 | US 2001-923198 | 20010806 |
| PRAI EP 2000-116819 | A | 20000804 | | |
| OS MARPAT 136:183603 | | | | |
| GI | | | | |



II

AB R6OZN:CR1R2 [I; R1,R2 = H, alkyl, (hetero)aryl, etc.; R6 = e.g., (un)substituted Ph; Z = e.g., 2,5-dimethyl-1,4-phenylene] were prepd. Thus, 3-chloro-6-nitro-p-xylene was etherified by 3-(F3C)C6H4OH and the reduced product condensed with thiazole-2-carboxaldehyde to give title compd. II. Data for biol. activity of I were given.

ST phenoxyphenylimine prepn agrochem fungicide

IT Fungicides
 (agrochem.; N-(phenoxyphenyl)imines and analogs)

IT 395663-54-4P 395663-55-5P 395663-56-6P
 395663-57-7P 395663-58-8P 395663-59-9P 395663-60-2P
 395663-62-4P 395663-64-6P 395663-66-8P 395663-67-9P 395663-68-0P
 395663-69-1P 395663-70-4P 395663-71-5P
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)

IT 98-17-9, 3-Trifluoromethylphenol 1122-62-9 10200-59-6,
 2-Thiazolecarboxaldehyde 34633-69-7 395663-72-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)

IT 287942-14-7P 287942-23-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; CAPLUS 1983:106883
- (2) Anon; NIPPON NOYAKU GAKKAISHI 1982, V7(8), P373
- (3) Anon; PATENT ABSTRACTS OF JAPAN 1985, V009(283), PC-313
- (4) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(12)
- (5) Baum, J; US 4659360 A 1987 HCAPLUS

- (6) Bayer Ag; DE 19623744 A 1997 HCAPLUS
- (7) Buckley, A; US 5468857 A 1995 HCAPLUS
- (8) Chugai Seiyaku Kk; JP 60126267 A 1985 HCAPLUS
- (9) Ciba Geigy Ag; GB 1413513 A 1975 HCAPLUS
- (10) Duerr, D; US 4389236 A 1983 HCAPLUS
- (11) Gupta, S; INDIAN JOURNAL OF CHEMISTRY, SECTION B: ORGANIC, INCL MEDICINAL
1979, V18(4), P381
- (12) Hough; WO 0046184 A 2000 HCAPLUS
- (13) Mitsubishi Chemical Corp; JP 11180964 A 1999 HCAPLUS
- (14) Moore, J; US 4059590 A 1977 HCAPLUS
- (15) Nippon Soda Co; JP 53113024 A 1978 HCAPLUS
- (16) Nissan Chemical Ind Ltd; EP 0563384 A 1993 HCAPLUS
- (17) Tsukamoto, M; WO 9921837 A 1999 HCAPLUS

IT 395663-54-4P 395663-55-5P 395663-56-6P

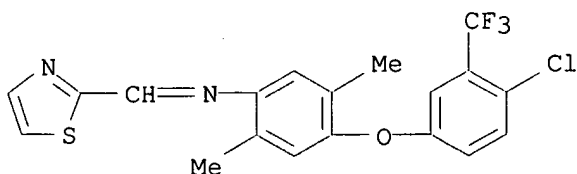
395663-57-7P 395663-58-8P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)

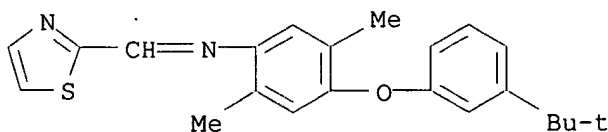
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CN Benzenamine, 4-[4-chloro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



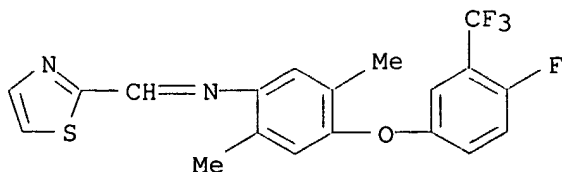
RN 395663-55-5 HCAPLUS

CN Benzenamine, 4-[3-(1,1-dimethylethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



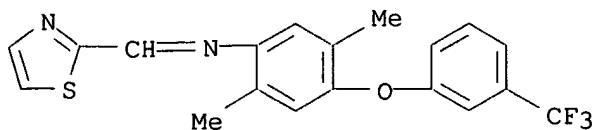
RN 395663-56-6 HCAPLUS

CN Benzenamine, 4-[4-fluoro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)

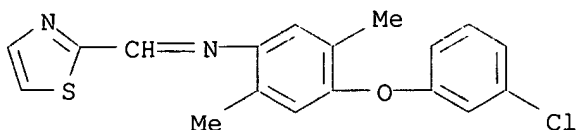


RN 395663-57-7 HCAPLUS

CN Benzenamine, 2,5-dimethyl-N-(2-thiazolylmethylene)-4-[3-(trifluoromethyl)phenoxy]- (9CI) (CA INDEX NAME)



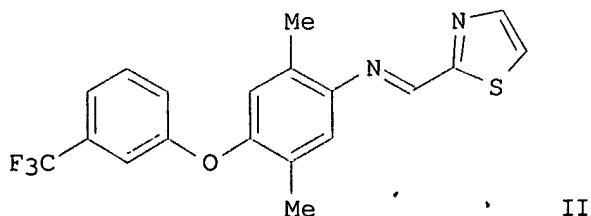
RN 395663-58-8 HCAPLUS
 CN Benzenamine, 4-(3-chlorophenoxy)-2,5-dimethyl-N-(2-thiazolylmethylene)-
 (9CI) (CA INDEX NAME)



L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
 AN 2002:104654 HCAPLUS
 DN 136:150990
 TI Preparation of N-(phenoxyphenyl)heteroaryimines as agrochemical fungicides
 IN Gerusz, Vincent; Mansfield, Darren James; Perez, Joseph; Vors, Jean-Pierre
 PA Aventis Cropscience S.A., Fr.
 SO Eur. Pat. Appl., 26 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM C07C251-24
 ICS C07D277-28; C07D207-32; C07D213-53; C07D307-70; A01N035-10;
 A01N043-78; A01N043-36; A01N043-08; A01N043-40
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5

FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 1178035 | A1 | 20020206 | EP 2001-420177 | 20010802 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| EP 1180512 | A1 | 20020220 | EP 2000-116819 | 20000804 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI EP 2000-116819 | A | 20000804 | | |
| OS MARPAT 136:150990 | | | | |
| GI | | | | |



II

AB R6OZN:CR1R2 [I; R1,R2 = H, alkyl, (hetero)aryl, etc.; R1R2 = atoms to complete a ring; R6 = substituted Ph; Z = 2,5-dimethyl-1,4-phenylene] were

prepd. Thus, 3-chloro-6-nitro-p-xylene was etherified by 3-(F3C)C6H4OH and the reduced product condensed with thiazole-2-carboxaldehyde to give title compd. II. Data for biol. activity of I were given.

ST phenoxyphenylheteroaryimine prepn agrochem fungicide

IT Fungicides

(agrochem.; N-(phenoxyphenyl)heteroaryimines)

IT 395663-54-4P 395663-55-5P 395663-56-6P

395663-57-7P 395663-58-8P 395663-59-9P 395663-60-2P

395663-62-4P 395663-64-6P 395663-66-8P 395663-67-9P 395663-68-0P

395663-69-1P 395663-70-4P 395663-71-5P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN

(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

IT 98-17-9 1122-62-9 10200-59-6, 2-Thiazolecarboxaldehyde 34633-69-7

395663-72-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

IT 287942-14-7P 287942-23-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; CAPLUS Accession No 1983:106883, NIPPON NOYAKU GAKKAISHI 1982, V7(8), P373

(2) Baum, J; US 4659360 A 1987 HCAPLUS

(3) Bayer Ag; DE 19623744 A 1997 HCAPLUS

(4) Buckley, A; US 5468857 A 1995 HCAPLUS

(5) Chugai Seiyaku Kk; JP 60-126267 A 1985 HCAPLUS

(6) Ciba Geigy Ag; GB 1413513 A 1975 HCAPLUS

(7) Duerr, D; US 4389236 A 1983 HCAPLUS

(8) Gupta, S; INDIAN JOURNAL OF CHEMISTRY, SECTION B: ORGANIC, INCL MEDICINAL 1979, V18(4), P381

(9) Hoechst Schering Agrevo Gmbh; WO 0046184 A 2000 HCAPLUS

(10) Mitsubishi Chemical Corp; JP 11-180964 A 1999, 12, HCAPLUS

(11) Moore, J; US 4059590 A 1977 HCAPLUS

(12) Nippon Soda Co; JP 53-113024 A 1978 HCAPLUS

(13) Nissan Chemical Ind Ltd; EP 0563384 A 1993 HCAPLUS

(14) Tsukamoto, M; WO 9921837 A 1999 HCAPLUS

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395663-57-7P 395663-58-8P

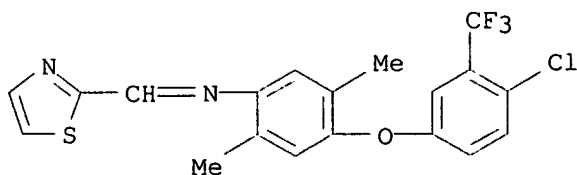
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(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

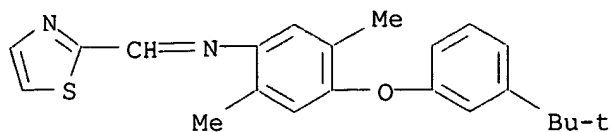
RN 395663-54-4 HCAPLUS

CN Benzenamine, 4-[4-chloro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



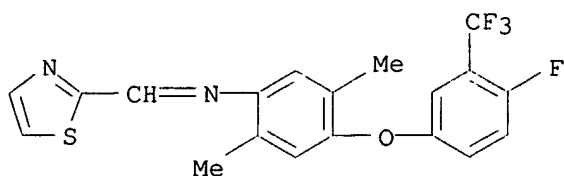
RN 395663-55-5 HCAPLUS

CN Benzenamine, 4-[3-(1,1-dimethylethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



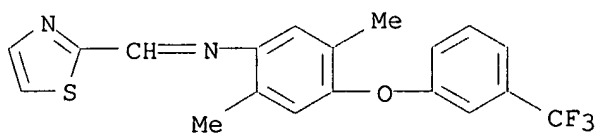
RN 395663-56-6 HCAPLUS

CN Benzenamine, 4-[4-fluoro-3-(trifluoromethyl)phenoxy]-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



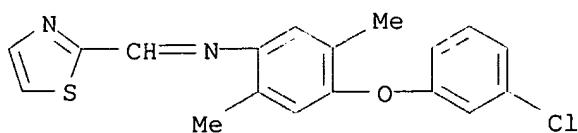
RN 395663-57-7 HCAPLUS

CN Benzenamine, 2,5-dimethyl-N-(2-thiazolylmethylene)-4-[3-(trifluoromethyl)phenoxy]- (9CI) (CA INDEX NAME)



RN 395663-58-8 HCAPLUS

CN Benzenamine, 4-(3-chlorophenoxy)-2,5-dimethyl-N-(2-thiazolylmethylene)- (9CI) (CA INDEX NAME)



=> fil marpat

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FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 137 ISS 8) (20020823/ED)

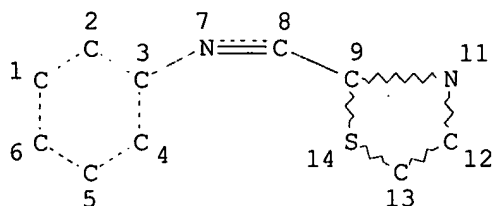
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(COVERAGE TO THESE DATES IS NOT COMPLETE):

| | | |
|----|-----------|-------------|
| US | 200209125 | 11 JUL 2002 |
| DE | 10200672 | 11 JUL 2002 |
| EP | 1226835 | 31 JUL 2002 |
| JP | 200221696 | 02 AUG 2002 |
| WO | 200205778 | 25 JUL 2002 |

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> d sta que 125

L1 STR



NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

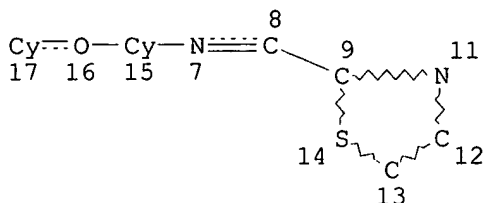
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NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L6 STR



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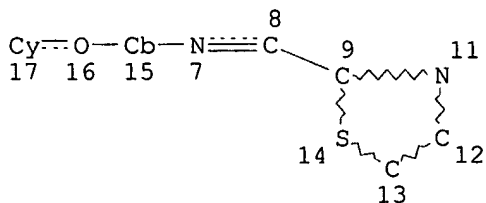
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

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L18 53 SEA FILE=MARPAT SUB=L16 SSS FUL L6

L19 STR



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ECOUNT IS E6 C AT 15

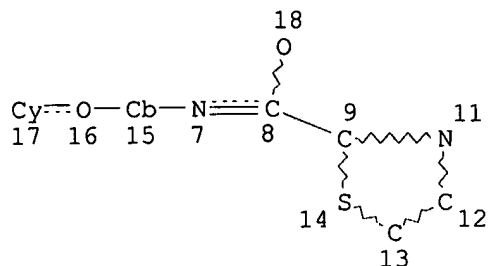
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NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L20 36 SEA FILE=MARPAT SUB=L18 SSS FUL L19
L21 STR



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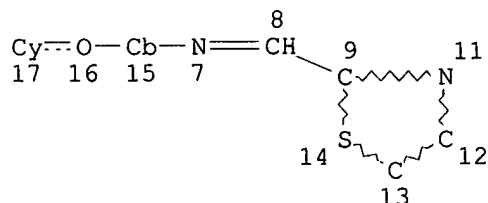
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GGCAT IS MCY UNS AT 15
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E6 C AT 15

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L22 21 SEA FILE=MARPAT SUB=L20 SSS FUL L21
L23 15 SEA FILE=MARPAT ABB=ON PLU=ON L20 NOT L22
L24 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 15
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E6 C AT 15

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L25 8 SEA FILE=MARPAT SUB=L23 SSS FUL L24

100.0% PROCESSED 14 ITERATIONS
SEARCH TIME: 00.00.01

8 ANSWERS

=> d his 125-

(FILE 'MARPAT' ENTERED AT 09:40:23 ON 29 AUG 2002)

L25 8 S L24 FUL SUB=L23
SAV L25 TEMP GERSTL923G/A

SEL AN
EDIT /AN /DN

FILE 'HCAPLUS' ENTERED AT 09:46:54 ON 29 AUG 2002
L26 8 S E1-E8
L27 6 S L26 NOT L12

FILE 'MARPAT' ENTERED AT 09:47:28 ON 29 AUG 2002

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:47:37 ON 29 AUG 2002
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FILE COVERS 1907 - 29 Aug 2002 VOL 137 ISS 9
FILE LAST UPDATED: 27 Aug 2002 (20020827/ED)

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=> d 127 bib abs retable tot

L27 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:345395 HCAPLUS

DN 134:348270

TI Preparation of vinylquinoxalines as apolipoprotein A-I expression stimulators

IN Yamamori, Teruo; Nagata, Kiyoshi; Ishizuka, Natsuki; Hayashi, Kunio

PA Shionogi and Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2001131151 | A2 | 20010515 | JP 1999-312313 | 19991102 |

OS MARPAT 134:348270

AB The stimulators, useful for treatment of arteriosclerosis and blood lipid disorder, comprise Ar1Xm(CZ1:CY1)nAr2 (Ar1, Ar2 = (un)substituted Ph, naphthyl, mono or dicyclic arom. heterocyclyl; X = QCZ2, CY2:CZ2, N:CZ2, CY2Y3, NY4, S, O; Q = CY2Y3, NY4; Y1-Y3, Z1, Z2 = H, halo, (un)substituted lower alkyl CO2H, lower alkoxy carbonyl, etc.; Y4 = H, lower alkyl; m = 0-1; n = 0-2), their prodrug, pharmaceutically acceptable salts, or hydrates. 2-Chloroquinoxaline was reacted with 4-chlorobenzaldehyde in the presence of methyltriphenylphosphonium bromide and BuLi in THF at room

*need
us date*

temp. for 30 min to give 61% 2-[2-(4-chlorophenyl)vinyl]quinoxaline showing good stimulating activity for promoting human apolipoprotein A-I gene.

L27 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:686535 HCAPLUS

DN 131:315906

TI Liquid crystal compounds having a chiral fluorinated terminal portion

IN Johnson, Gilbert C.; Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.; Spawn, Terence D.

PA 3M Innovative Properties Company, USA

SO U.S., 36 pp., Cont.-in-part of U.S. 5,702,637.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|------------------|----------|
| PI | US 5972241 | A | 19991026 | US 1997-965348 | 19971106 |
| | US 5702637 | A | 19971230 | US 1995-424892 | 19950419 |
| | CA 2217608 | AA | 19961024 | CA 1996-2217608 | 19960311 |
| | TW 445292 | B | 20010711 | TW 1996-85103385 | 19960321 |
| PRAI | US 1995-424892 | A2 | 19950419 | | |

OS MARPAT 131:315906

AB The invention relates to fluorinated chiral smectic liq. crystal compds., to a process for the prepn. of such compds. (and no intermediates for use therein), and to liq. crystal compd. mixts. and electrooptical display devices contg. such compds. F-contg., chiral liq. crystal compds. comprise (a) a chiral fluoro-chem. terminal portion contg. .gtoreq.1 methylene group and optionally contg. .gtoreq.1 catenary ether O atom; (b) a satd., chiral or achiral, hydrocarbon terminal portion; and (c) a central core connecting the terminal portions. The compds. have smectic mesophases or latent smectic mesophases and are useful, for example, in liq. crystal display devices.

RETABLE

| Referenced Author (RAU) | Year (RPY) | VOL (RVL) | PG (RPG) | Referenced Work (RWK) | Referenced File |
|----------------------------|---------------|--------------|-------------|--------------------------|--------------------|
| Abe, T | 1982 | | 37 | Preparation, Propert | |
| Anon | 1982 | | | EP 0047877 | HCAPLUS |
| Anon | 1982 | | | JP 57165334 | HCAPLUS |
| Anon | 1985 | | | EP 0163229 | HCAPLUS |
| Anon | 1985 | | | DE 3332692 | HCAPLUS |
| Anon | 1986 | | | EP 0181601 | HCAPLUS |
| Anon | 1986 | | | GB 2162515 | HCAPLUS |
| Anon | 1988 | | | EP 0255236 | HCAPLUS |
| Anon | 1988 | | | WO 8803530 | HCAPLUS |
| Anon | 1988 | | | WO 8805803 | HCAPLUS |
| Anon | 1988 | | | WO 8808441 | HCAPLUS |
| Anon | 1989 | | | JP 01104031 | HCAPLUS |
| Anon | 1989 | | | EP 0331367 | HCAPLUS |
| Anon | 1989 | | | EP 0332025 | HCAPLUS |
| Anon | 1990 | | | JP 269443 | |
| Anon | 1991 | | | WO 9100897 | HCAPLUS |
| Anon | 1991 | | | WO 9111418 | HCAPLUS |
| Anon | 1992 | | | DE 4034123 | HCAPLUS |
| Anon | 1993 | | | EP 0548548 | HCAPLUS |
| Anon | 1994 | | | DE 4308028 | HCAPLUS |
| Anon | 1995 | | | EP 0641850 | HCAPLUS |
| Anon | 1995 | | | EP 0667384 | HCAPLUS |
| Anon | 1995 | | | DE 4444701 | HCAPLUS |
| Anon | 1964 | 86 | 964 | J Am Chem Soc | |
| Anon | 1985 | 57 | 1356 | J Appl Phys | |

| | | | | | |
|--------------|------|------|------|----------------------|---------|
| Anon | 1985 | 24 | 1389 | Jap Journal of Appli | |
| Anon | 1978 | 47 | 1 | Molecular Crystals L | |
| Anon | 1981 | 67 | 235 | Molecular Crystals L | |
| Anon | 1984 | 114 | 237 | Molecular Crystals L | |
| Anon | 1985 | 2 | 111 | Molecular Crystals L | |
| Arnold, Z | 1958 | 23 | 452 | Coll Czech Chem Comm | |
| Beguim | 1981 | | | US 4256656 | HCAPLUS |
| Bloom | 1992 | | | US 5141669 | HCAPLUS |
| Byun | 1989 | 30 | 2751 | Tet, Lett | HCAPLUS |
| Chaudhary | 1979 | | 95 | Tetrahedron Letters | HCAPLUS |
| Clark | 1983 | | | US 4367924 | |
| Clark, N | 1980 | 36 | 899 | Appl Phys Lett | HCAPLUS |
| Coates | 1978 | | | US 4113647 | HCAPLUS |
| Costello | 1994 | | | US 5362919 | HCAPLUS |
| Crossland | 1983 | | | US 4411494 | |
| Crossland | 1983 | | | US 4419664 | |
| Crossland | 1985 | | | US 4528562 | |
| Desbois | 1989 | | | US 4837364 | HCAPLUS |
| Eidenschink | 1982 | | | US 4330426 | HCAPLUS |
| Eidenschink | 1986 | | | US 4572794 | HCAPLUS |
| Eidenschink | 1986 | | | US 4617140 | HCAPLUS |
| Epstein | 1995 | | | US 5417883 | HCAPLUS |
| Fukuda | 1994 | 4 | 997 | J Mater Chem | HCAPLUS |
| Goodby | 1986 | | | US 4613209 | HCAPLUS |
| Goodby, J | 1984 | 4 | 1 | Liquid Crystals & Or | HCAPLUS |
| Gray | 1989 | | 2041 | J Chem Soc, Perkin T | HCAPLUS |
| Gray, G | 1974 | 1 | 142 | Liquid Crystals & Pl | |
| Higuchi | 1986 | | | US 4592858 | HCAPLUS |
| Hirai | 1986 | | | US 4564694 | HCAPLUS |
| Holy, A | 1973 | 38 | 1371 | Collection Chzechosl | HCAPLUS |
| Isogai | 1986 | | | US 4576732 | HCAPLUS |
| Iwakura | 1964 | 29 | 379 | J Org Chem | HCAPLUS |
| Jajer | 1990 | | 556 | Synthesis | |
| Janulis | 1989 | | | US 4886619 | HCAPLUS |
| Janulis | 1992 | | | US 5082587 | HCAPLUS |
| Janulis | 1993 | | | US 5262082 | HCAPLUS |
| Janulis | 1995 | | | US 5399291 | HCAPLUS |
| Janulis | 1995 | | | US 5437812 | HCAPLUS |
| Johnson | 1997 | | | US 5702637 | HCAPLUS |
| Kahn, F | 1973 | 22 | 111 | Appl Phys Lett | HCAPLUS |
| Katagiri | 1989 | | | US 4816178 | HCAPLUS |
| Kistner | 1997 | | | US 5658491 | HCAPLUS |
| Knunyants, I | 1963 | | 461 | Eng Trans, Translati | |
| Lagerwall | 1987 | | | 1st International | |
| Langlois | 1989 | | | US 4816596 | HCAPLUS |
| Le Barny | 1986 | | | US 4614608 | HCAPLUS |
| Le Barny, P | 1985 | 127 | 413 | Molecular Crystals a | HCAPLUS |
| Meyer, R | 1975 | 36 | L-69 | J Physique | |
| Middleton | 1975 | 40 | 574 | J Org Chem | HCAPLUS |
| Misaki | 1983 | | | US 4393231 | HCAPLUS |
| Misaki | 1984 | | | US 4481149 | HCAPLUS |
| Miyasato | 1983 | 22 | L661 | Jap J Appl Phys | |
| Miyazawa | 1988 | | | US 4780242 | HCAPLUS |
| Mochizuki, A | 1992 | 1665 | 108 | SPIE | |
| Naciri | 1993 | 148 | 297 | Ferroelectrics | HCAPLUS |
| Niciri | 1993 | | | US 5252695 | HCAPLUS |
| Nohira, H | 1990 | 180B | 379 | Mol Cryst Liq Cryst | HCAPLUS |
| Partridge, M | 1947 | | 390 | J Chem Soc | HCAPLUS |
| Pelzl | 1979 | 14 | 817 | Kristall Technik | HCAPLUS |
| Pelzl | 1987 | 2 | 131 | Liquid Crystals | HCAPLUS |
| Pelzl, G | 1979 | 53 | 167 | Mol Cryst Liq Cryst | HCAPLUS |
| Radcliffe | 1994 | | | US 5377033 | |
| Rich | 1984 | | | US 4439015 | HCAPLUS |

| | | | | | |
|-----------------|------|-----|------|----------------------|---------|
| Romer | 1983 | | | US 4400293 | HCAPLUS |
| Saito | 1987 | | | US 4668427 | HCAPLUS |
| Sakaguchi | 1991 | 114 | 265 | Ferroelectrics | HCAPLUS |
| Sato | 1980 | | | US 4202791 | HCAPLUS |
| Savu, P | 1994 | 11 | 558 | Kirk-Othmer Encyclop | |
| Schiller | 1987 | 2 | 21 | Liquid Crystals | HCAPLUS |
| Shionozaki | 1989 | | | US 4879060 | HCAPLUS |
| Shoji | 1990 | | | US 4914224 | HCAPLUS |
| Sierra | 1992 | 114 | 7645 | J Am Chem Soc | HCAPLUS |
| Simons | 1950 | | | US 2519983 | HCAPLUS |
| Sirutkaitis, R | 1980 | | 1023 | Advances in Liquid C | |
| Steinstrasser | 1977 | | | US 4001137 | HCAPLUS |
| Steinstrasser | 1977 | | | US 4011173 | HCAPLUS |
| Streitweiser, A | 1976 | | 378 | Introduction to Orga | |
| Suzuki | 1991 | | | US 5051527 | HCAPLUS |
| Suzuki | 1993 | | | US 5194179 | HCAPLUS |
| Tesoro | 1969 | | | US 3470258 | HCAPLUS |
| Tristani-Kendra | 1991 | | | US 5062691 | HCAPLUS |
| Wachtler | 1992 | | | US 5167859 | HCAPLUS |
| Yoshinaga | 1989 | | | US 4876027 | HCAPLUS |
| Zaschke, H | 1975 | 15 | 441 | Z Chem | HCAPLUS |
| Zverkova, T | 1980 | | 991 | Advances in Liquid C | |

L27 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:467949 HCAPLUS

DN 131:123054

TI Process for controlling cone tilt angle of smectic liquid crystal composition

IN Kistner, John F.; Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.

PA Minnesota Mining and Mfg. Co., USA

SO U.S., 31 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5928562 | A | 19990727 | US 1997-827287 | 19970327 |
| | US 5658491 | A | 19970819 | US 1995-542179 | 19951012 |
| PRAI | US 1995-542179 | | 19951012 | | |

OS MARPAT 131:123054

AB A process for controlling the cone tilt angle of a smectic liq. crystal compn. for an electrooptical display device comprises combining (a) at least one liq. crystal compn. comprising at least one smectic or latent smectic liq. crystal compd. comprising (i) an aliph. fluorocarbon terminal portion comprising a terminal fluoroalkyl or fluoroether group and an alkylene group having at least two carbon atoms and contg. at least one catenary ether oxygen atom, (ii) an aliph. hydrocarbon terminal portion, and (iii) a central core connecting the terminal portions and (b) at least one liq. crystal compn. comprising at least one smectic or latent smectic liq. crystal compd. with the provisos that at least one of the compns. (a) and (b) comprises at least one chiral liq. crystal compd. and that the combining of compns. (a) and (b) provides an optically active, tilted chiral smectic liq. crystal compn. The process enables control of the cone tilt angle and thereby control of the brightness characteristics of the display device employing the liq. crystal compn.

RETABLE

| Referenced Author (RAU) | Year (RPY) | VOL (RVL) | PG (RPG) | Referenced Work (RWK) | Referenced File |
|----------------------------|---------------|--------------|-------------|--------------------------|--------------------|
| Anon | 1982 | | | EP 0047877 | HCAPLUS |
| Anon | 1985 | | | EP 0163299 | |

| | | | | | |
|---------------|------|------|------|----------------------|---------|
| Anon | 1985 | | | DE 3332692 | HCAPLUS |
| Anon | 1986 | | | EP 0181601 | HCAPLUS |
| Anon | 1987 | | | EP 0220747 | HCAPLUS |
| Anon | 1989 | | | EP 0332025 | HCAPLUS |
| Anon | 1992 | | | DE 4034123 | HCAPLUS |
| Anon | 1993 | | | EP 0548548 | HCAPLUS |
| Anon | 1995 | | | EP 0641850 | HCAPLUS |
| Beguim | 1981 | | | US 4256656 | HCAPLUS |
| Byun | 1989 | 30 | 2751 | Tetrahedron Letters | HCAPLUS |
| Chaudhary | 1979 | | 95 | Tetrahedron Letters | HCAPLUS |
| Clark | 1983 | | | US 4367924 | |
| Coates | 1978 | | | US 4113647 | HCAPLUS |
| Eidenschink | 1982 | | | US 4330426 | HCAPLUS |
| Fukuda | 1994 | 4 | 997 | J Mater Chem | HCAPLUS |
| Gray | 1989 | II | 2041 | J Chem Soc Perkin Tr | |
| Iwakura | 1964 | 29 | 379 | J Org Chem | HCAPLUS |
| Jager | 1990 | | 556 | Synthesis | |
| Middleton | 1975 | 40 | 574 | J Org Chem | HCAPLUS |
| Misaki | 1983 | | | US 4393231 | HCAPLUS |
| Miyasato | 1983 | 22 | L661 | Jap J Appl Phys | |
| Naciri | 1993 | 148 | 297 | Ferroelectrics | HCAPLUS |
| Nohira | 1990 | 180B | 379 | Mol Cryst Liq Cryst | HCAPLUS |
| Sakaguchi | 1991 | 114 | 265 | Ferroelectrics | HCAPLUS |
| Sato | 1980 | | | US 4202791 | HCAPLUS |
| Simons | 1950 | | | US 2519983 | HCAPLUS |
| Steinstrasser | 1977 | | | US 4001137 | HCAPLUS |
| Steinstrasser | 1977 | | | US 4011173 | HCAPLUS |
| Tesoro | 1969 | | | US 3470258 | HCAPLUS |

L27 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:460408 HCAPLUS

DN 131:94970

TI Liquid crystal compounds having chiral fluorinated terminal portion for electrooptical display devices

IN Hasegawa, Masakazu; Keyes, Michael P.; Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.; Spawn, Terence D.

PA Minnesota Mining and Manufacturing Company, USA

SO PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|---|----------|--|----------|
| PI | WO 9933814 | A1 | 19990708 | WO 1998-US14624 | 19980715 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: | | FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |
| | US 6309561 | B1 | 20011030 | US 1997-998400 | 19971224 |
| | AU 9884862 | A1 | 19990719 | AU 1998-84862 | 19980715 |
| | EP 1042302 | A1 | 20001011 | EP 1998-935667 | 19980715 |
| | R: | BE, DE, FR, GB, IT | | | |
| | JP 2001527070 | T2 | 20011225 | JP 2000-526498 | 19980715 |
| PRAI | US 1997-998400 | A | 19971224 | | |
| | WO 1998-US14624 | W | 19980715 | | |
| OS | MARPAT 131:94970 | | | | |
| AB | Fluorine-contg., chiral liq. crystal compds. comprise (a) a chiral fluorochem. terminal portion comprising (i) at least one chiral center, | | | | |

which can optionally be heteroatom-substituted; (ii) a terminal fluoroalkyl, fluoroether, perfluoroalkyl, or perfluoroether group; and (iii) an alkylene or fluoroalkylene group optionally contg. at least one catenary ether oxygen atom; (b) a chiral or achiral terminal portion consisting of a hydrocarbon or hydrocarbon ether group, and, when chiral, comprising at least one chiral center, which can optionally be heteroatom-substituted; and (c) a central core connecting the terminal portions; the alkylene or fluoroalkylene group of the chiral fluorochem. terminal portion having at least 3 in-chain atoms and being located between the chiral center of the chiral fluorochem. terminal portion and the central core. The compds. have smectic mesophases or latent smectic mesophases and are useful in fabrication of electrooptical display devices.

RETABLE

| Referenced Author (RAU) | Year (RPY) | VOL (RVL) | PG (RPG) | Referenced Work (RWK) | Referenced File |
|----------------------------|---------------|--------------|-------------|--------------------------|--------------------|
| Canon Kk | 1989 | | | EP 0301511 A | HCAPLUS |
| Canon Kk | 1992 | | | EP 0499221 A | HCAPLUS |
| Minnesota Mining & Mfg | 1996 | | | WO 9633251 A | HCAPLUS |
| Nagashima, Y | 1997 | 23 | 537 | LIQUID CRYSTALS | HCAPLUS |
| Sumitomo Chemical Co | 1991 | | | EP 0434297 A | HCAPLUS |
| Sumitomo Chemical Co | 1995 | | | EP 0667384 A | HCAPLUS |

L27 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:712307 HCAPLUS

DN 129:323912

TI Compounds and process for controlling cone tilt angle in mixtures of smectic liquid crystal compounds

IN Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.; Spawn, Terence D.

PA Minnesota Mining and Manufacturing Co., USA

SO PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9846697 | A1 | 19981022 | WO 1998-US5270 | 19980318 |
| | W: CA, CN, JP, KR | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5855812 | A | 19990105 | US 1997-827753 | 19970411 |
| | EP 973844 | A1 | 20000126 | EP 1998-910468 | 19980318 |
| | R: DE, FR, GB, NL | | | | |
| | JP 2001520687 | T2 | 20011030 | JP 1998-543901 | 19980318 |
| PRAI | US 1997-827753 | A | 19970411 | | |
| | WO 1998-US5270 | W | 19980318 | | |

OS MARPAT 129:323912

AB A process for controlling the cone tilt angle of a tilted smectic liq. crystal compn. comprises the step of combining (a) at least one liq. crystal compn. comprising at least one smectic or latent smectic liq. crystal compd. comprising (i) an aliph. fluorocarbon terminal portion comprising a terminal fluoroalkyl or fluoroether group and an alkylene group having at least two carbon atoms and contg. at least one catenary ether oxygen atom, (ii) an aliph. hydrocarbon terminal portion, and (iii) a central core connecting the terminal portions, wherein the alkylene group of the aliph. fluorocarbon terminal portion is directly linked to the central core by a moiety selected from the group consisting of a covalent bond, -CH=CH-, and -C.tplbond.C- and (b) at least one liq. crystal compn. comprising at least one smectic or latent smectic liq. crystal compd. with the provisos that at least one of the compns. (a) and (b) comprises at least one chiral liq. crystal compd. and that the

combining of compns. (a) and (b) provides an optically active, tilted chiral smectic liq. crystal compn. The process enables control of cone tilt angle and thereby control of the brightness characteristics of liq. crystal display devices.

L27 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS

AN 1996:753896 HCAPLUS

DN 126:39837

TI Liquid crystal compounds having chiral fluorinated terminal portion for display devices

IN Johnson, Gilbert C.; Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.; Spawn, Terence D.

PA Minnesota Mining and Mfg. Co., USA

SO PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|----------|
| PI | WO 9633251 | A1 | 19961024 | WO 1996-US2636 | 19960311 |
| | W: CA, JP, KR | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5702637 | A | 19971230 | US 1995-424892 | 19950419 |
| | CA 2217608 | AA | 19961024 | CA 1996-2217608 | 19960311 |
| | EP 821719 | A1 | 19980204 | EP 1996-908535 | 19960311 |
| | R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE | | | | |
| | JP 11505212 | T2 | 19990518 | JP 1996-531712 | 19960311 |
| | TW 445292 | B | 20010711 | TW 1996-85103385 | 19960321 |
| PRAI | US 1995-424892 | A | 19950419 | | |
| | WO 1996-US2636 | W | 19960311 | | |

OS MARPAT 126:39837

AB Fluorine-contg., chiral liq. crystal compds. comprise (a) a chiral fluorochem. terminal portion contg. at least one methylene group and optionally contg. at least one catenary ether oxygen atom, (b) a satd., chiral or achiral, hydrocarbon terminal portion, and (c) a central core connecting the terminal portions. The compds. have smectic mesophases or latent smectic mesophases and are useful in liq.-crystal display devices.

=> fil marpat

FILE 'MARPAT' ENTERED AT 09:47:57 ON 29 AUG 2002

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FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 137 ISS 8) (20020823/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 200209125 11 JUL 2002

DE 10200672 11 JUL 2002

EP 1226835 31 JUL 2002

JP 200221696 02 AUG 2002

WO 200205778 25 JUL 2002

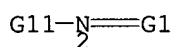
Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

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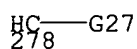
L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS

IC ICM C07C251-24
 ICS C07D277-28; C07D207-32; C07D213-53; C07D307-70; A01N035-10;
 A01N043-78; A01N043-36; A01N043-08; A01N043-40
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5
 TI Preparation of N-(phenoxyphenyl)imines and analogs as agrochemical
 fungicides
 ST phenoxyphenylimine prepn agrochem fungicide
 IT Fungicides
 (agrochem.; N-(phenoxyphenyl)imines and analogs)
 IT 395663-54-4P 395663-55-5P 395663-56-6P 395663-57-7P 395663-58-8P
 395663-59-9P 395663-60-2P 395663-62-4P 395663-64-6P 395663-66-8P
 395663-67-9P 395663-68-0P 395663-69-1P 395663-70-4P 395663-71-5P
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)
 IT 98-17-9, 3-Trifluoromethylphenol 1122-62-9 10200-59-6,
 2-Thiazolecarboxaldehyde 34633-69-7 395663-72-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)
 IT 287942-14-7P 287942-23-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of N-(phenoxyphenyl)imines and analogs as agrochem. fungicides)

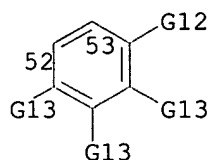
MSTR 1A



G1 = 278



G16 = thiazolyl (SO)
 G17 = O
 G25 = 53-2 52-31



G27 = 2-thiazolyl
 MPL: claim 1
 NTE: and salts

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 7

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS
 IC ICM C09K019-34
 ICS C09K019-32; C07C025-13; C07D239-02; C07D319-12; C07D263-02
 NCL 252299610
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

Section cross-reference(s): 75

TI Liquid crystal compounds having a chiral fluorinated terminal portion

ST liq crystal chiral fluorinated terminal

IT Liquid crystals

(chiral smectic; prepn. of liq. crystal compds. with chiral fluorinated terminal chain and having smectic mesophase suitable for liq. crystal mixt. display devices)

IT Liquid crystal displays

(prepn. of liq. crystal compds. with chiral fluorinated terminal chain and having smectic mesophase suitable for liq. crystal mixt. display devices)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 184350-39-8P | 184350-41-2P | 184350-43-4P | 184350-44-5P | 184350-45-6P |
| | 184350-46-7P | 184350-48-9P | 184350-52-5P | 184350-54-7P | 184350-62-7P |
| | 184350-71-8P | 184350-72-9P | 184350-73-0P | 184350-74-1P | 184350-75-2P |
| | 184350-76-3P | 184350-77-4P | 184350-78-5P | 184350-79-6P | 184350-80-9P |
| | 184350-81-0P | 184350-82-1P | 232921-55-0P | 247908-34-5P | 247908-35-6P |
| | 247908-36-7P | 247908-37-8P | 247908-39-0P | 247908-40-3P | 247908-41-4P |
| | 247908-42-5P | 247908-43-6P | 247908-44-7P | 247908-45-8P | 247908-46-9P |
| | 247908-47-0P | 247908-66-3P | 247908-68-5P | 247908-69-6P | 247908-70-9P |
| | 247908-71-0P | 247908-72-1P | 247908-73-2P | 247908-74-3P | 247908-75-4P |
| | 247908-76-5P | 247908-77-6P | 247908-78-7P | 247908-79-8P | 247908-80-1P |
| | 247908-81-2P | 247908-82-3P | 247908-84-5P | 247908-85-6P | 247908-86-7P |
| | 247908-87-8P | 247908-88-9P | 247908-89-0P | 247908-90-3P | 247908-91-4P |
| | 247908-92-5P | 247908-93-6P | 247908-94-7P | 247908-95-8P | 247908-96-9P |
| | 247908-97-0P | 247908-98-1P | 247908-99-2P | 247909-00-8P | 247909-01-9P |

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (chiral smectic liq. crystal compds. with fluorinated terminal chain for liq. crystal mixt. display devices)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 247908-50-5P | 247908-52-7P | 247908-55-0P | 247908-57-2P | 247908-61-8P |
| | 247908-63-0P | 247908-65-2P | | | |

RL: DEV (Device component use); NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

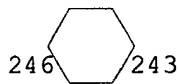
(liq. crystal display mixt. device contg. smectic compds. with chiral fluorinated terminal chain)

MSTR 1

G1-G11-G20-G22

2 3 4 5

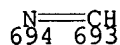
G7 = 246-1 243-238



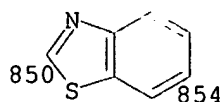
G8 = O

G9 = p-C6H4

G10 = 694-239 693-3



G11 = 850-2 854-4



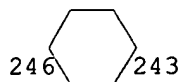
MPL: claim 4
 NTE: additional oxygen interruptions of alkylene in G21 and perfluoroalkyl
 in G22 also claimed

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS
 IC ICM C09K019-04
 ICS C09K019-34; C07D239-26; C07D239-34
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 75
 TI Compounds and process for controlling cone tilt angle in mixtures of
 smectic liquid crystal compounds
 ST smectic liq crystal compn display device; cone tilt angle liq crystal
 display
 IT Liquid crystal displays
 (comps. and process for controlling cone tilt angles in smectic liq.
 crystal compns. for)
 IT 214974-35-3 214974-36-4 214974-38-6 214974-39-7 214974-40-0
 214974-41-1 214974-42-2 214974-44-4 214974-45-5 214974-46-6
 214974-47-7 214974-48-8 214974-49-9 214974-50-2 214974-51-3
 214974-52-4 214974-53-5 214974-54-6 214974-55-7 214974-57-9
 214974-58-0 214974-59-1 214974-60-4 214974-61-5 214974-62-6
 214974-63-7 214974-64-8 214974-65-9
 RL: DEV (Device component use); TEM (Technical or engineered material
 use); USES (Uses)
 (prepn. and use in controlling cone tilt angles in smectic liq. crystal
 compns. for electrooptical display devices)

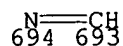
MSTR 1A

G1—G11—G20—G22
 2 3 4 5

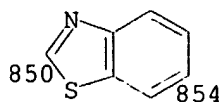
G7 = 246-1 243-238



G8 = O
 G9 = p-C6H4
 G10 = 694-239 693-3



G11 = 850-2 854-4



MPL: claim 1

NTE: additional oxygen interruptions of alkylene in G21 and perfluoroalkyl in G22 also claimed

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS

IC ICM C07C251-24

ICS C07D277-28; C07D207-32; C07D213-53; C07D307-70; A01N035-10;
A01N043-78; A01N043-36; A01N043-08; A01N043-40

CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 5

TI Preparation of N-(phenoxyphenyl)heteroaryimines as agrochemical fungicides
ST phenoxyphenylheteroaryimine prepn agrochem fungicide

IT Fungicides

(agrochem.; N-(phenoxyphenyl)heteroaryimines)

IT 395663-54-4P 395663-55-5P 395663-56-6P 395663-57-7P 395663-58-8P

395663-59-9P 395663-60-2P 395663-62-4P 395663-64-6P 395663-66-8P

395663-67-9P 395663-68-0P 395663-69-1P 395663-70-4P 395663-71-5P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

IT 98-17-9 1122-62-9 10200-59-6, 2-Thiazolecarboxaldehyde 34633-69-7
395663-72-6

RL: RCT (Reactant); RACT (Reactant or reagent)

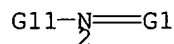
(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

IT 287942-14-7P 287942-23-8P

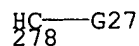
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. of N-(phenoxyphenyl)heteroaryimines as agrochem. fungicides)

MSTR 1A



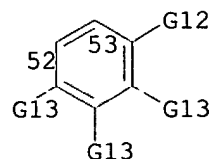
G1 = 278



G16 = thiazolyl (SO)

G17 = O

G25 = 53-2 52-31



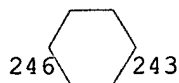
G27 = 2-thiazolyl
 MPL: claim 1
 NTE: and salts

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS
 IC ICM C09K019-06
 ICS C09K019-34; C09K019-30; C07C022-00
 NCL 252299600
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 75
 TI Process for controlling cone tilt angle of smectic liquid crystal
 composition
 ST cone tilt angle smectic liq crystal; display liq crystal cone tilt angle
 IT Liquid crystal displays
 (process for controlling cone tilt angles of smectic liq. crystal
 compns. for)
 IT 174861-33-7P 189827-46-1P 189827-49-4P 189827-51-8P 189870-57-3P
 189870-58-4P 189870-59-5P 189870-60-8P 189870-61-9P 189870-62-0P
 189870-63-1P 189870-64-2P 189870-65-3P 189870-66-4P 189870-67-5P
 189870-68-6P 189870-69-7P 189870-71-1P 189870-72-2P 189870-73-3P
 189870-74-4P 189870-75-5P 189870-76-6P 189870-77-7P 189870-78-8P
 189870-79-9P 189870-80-2P 189870-81-3P 189870-82-4P 189870-83-5P
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 232921-61-8P 232921-62-9P 232921-63-0P 232921-64-1P 232921-66-3P
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 232921-84-5P 232921-85-6P 232921-86-7P 232921-87-8P 232921-88-9P
 232921-89-0P 232921-90-3P 232921-91-4P 232921-92-5P 232921-93-6P
 232921-94-7P 232921-95-8P 232921-96-9P
 RL: DEV (Device component use); SPN (Synthetic preparation); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (prepn. and use in smectic liq. crystal compns. with improved cone tilt
 angles for electrooptical display devices)
 IT 152915-34-9 152915-36-1 174861-32-6 174861-36-0 174861-41-7
 184350-41-2 232921-43-6 232921-44-7
 RL: DEV (Device component use); TEM (Technical or engineered material
 use); USES (Uses)
 (smectic liq. crystal compns. with improved cone tilt angles for
 electrooptical display device fabrication contg.)

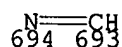
MSTR 1

G1—G11—G20—G22
 2—3—4—5

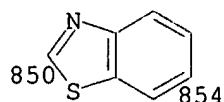
G7 = 246-1 243-238



G8 = O
 G9 = p-C6H4
 G10 = 694-239 693-3



G11 = 850-2 854-4



MPL: claim 1

NTE: additional oxygen interruptions of alkylene in G21 and perfluoroalkyl
in G22 also claimed

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS

IC ICM C09K019-34

ICS C09K019-12; C09K019-04; C07D239-26; C07D239-34; C07D263-24;
C07D307-32; C07D405-12; C07D413-10

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

Section cross-reference(s): 75

TI Liquid crystal compounds having chiral fluorinated terminal portion for
display devices

ST fluorinated chiral liq crystal display device

IT Electrooptical imaging devices

(fluorine-contg. chiral liq. crystals for)

IT 184350-37-6 184350-38-7 184350-39-8 184350-40-1 184350-41-2

184350-42-3 184350-43-4 184350-44-5 184350-45-6 184350-46-7

184350-48-9 184350-50-3 184350-52-5 184350-54-7 184350-57-0

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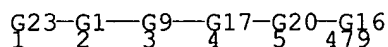
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184350-82-1

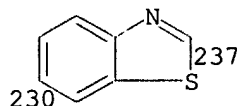
RL: DEV (Device component use); TEM (Technical or engineered material
use); USES (Uses)

(electrooptical display devices using liq. crystal compns. contg.)

MSTR 1A

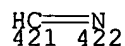


G4 = 230-1 237-143

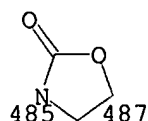


G5 = p-C6H4 (SO (1) G3)

G6 = 421-142 422-144



G9 = O
G17 = 485-3 487-5



MPL: claim 1

L25 8 ANSWERS MARPAT COPYRIGHT 2002 ACS
IC ICM C07D213-53
ICS A61K031-4402; A61K031-4433; A61K031-4436; A61K031-4439; A61K031-47;
A61K031-498; A61P003-06; A61P009-10; A61P043-00; C07D213-06;
C07D215-14; C07D241-42; C07D401-06; C07D405-06; C07D409-06;
C07D417-06
CC 1-8 (Pharmacology)
Section cross-reference(s): 28, 63
TI Preparation of vinylquinoxalines as apolipoprotein A-I expression
stimulators
ST apolipoprotein A I expression stimulator; antiarteriosclerotic
vinylquinoxaline prepn; blood lipid disorder treatment vinylquinoxaline
prepn
IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A-I; prepn. of vinylquinoxalines as apolipoprotein A-I expression
stimulators)
IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood, disorder, treatment of; prepn. of vinylquinoxalines as
apolipoprotein A-I expression stimulators)
IT Antiartherosclerotics
(prepn. of vinylquinoxalines as apolipoprotein A-I expression
stimulators)
IT 339295-70-4P 339295-79-3P 339295-83-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
(prepn. of vinylquinoxalines as apolipoprotein A-I expression
stimulators)
IT 714-08-9P 838-34-6P 1437-15-6P 1666-96-2P 1834-86-2P 2620-81-7P
5021-43-2P 5021-46-5P 13206-42-3P 14251-81-1P 16032-40-9P
17105-02-1P 17286-63-4P 17286-67-8P 17755-52-1P 21550-52-7P
21640-83-5P 22746-28-7P 24698-70-2P 27952-03-0P 33070-08-5P
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339296-19-4P 339296-20-7P 339315-60-5P 339315-61-6P 339315-62-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of vinylquinoxalines as apolipoprotein A-I expression stimulators)

IT 91-63-4, Quinaldine 100-52-7, Benzaldehyde, reactions 100-83-4, 3-Hydroxybenzaldehyde 104-55-2, Cinnamaldehyde 104-87-0, p-Tolualdehyde 104-88-1, 4-Chlorobenzaldehyde, reactions 498-62-4, Thiophene-3-carbaldehyde 1003-29-8, Pyrrole-2-carbaldehyde 1448-87-9, 2-Chloroquinoxaline 2969-81-5, Ethyl 4-bromobutyrate 6959-47-3, 2-Chloromethylpyridine hydrochloride 16179-97-8, 2-Pyridylacetic acid hydrochloride

RL: RCT (Reactant); RACT (Reactant or reagent)

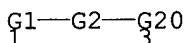
(prepn. of vinylquinoxalines as apolipoprotein A-I expression stimulators)

IT 1504-75-2P, 4-Methylcinnamaldehyde 2905-82-0P, Methyl 2-hydroxy-5-methoxybenzoate 4377-33-7P, 2-Chloromethylpyridine 14756-03-7P 39996-87-7P, Diethyl pyridin-2-ylmethylphosphonate 73718-01-1P 132376-87-5P 339295-58-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of vinylquinoxalines as apolipoprotein A-I expression stimulators)

MSTR 1



G1 = Ph (SO (1-) G15)

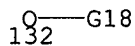
G3 = N

G7 = 29



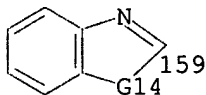
G14 = S

G15 = 132



G18 = Ph

G20 = 159



MPL: claim 1

NTE: substitution is restricted

NTE: or prodrugs, pharmaceutically acceptable salts or hydrates

NTE: additional ring formation also claimed

ICS C09K019-34

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 28, 75

TI Liquid crystal compounds having chiral fluorinated terminal portion for electrooptical display devices

ST fluorinated chiral liq crystal electrooptical display

IT Liquid crystals
(having chiral fluorinated terminal portions)

IT Liquid crystal displays
(liq. crystal compds. having chiral fluorinated terminal portions for)

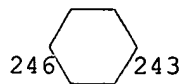
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229970-22-3P 229970-23-4P 229970-24-5P 229970-25-6P 229970-59-6P

RL: DEV (Device component use); SPN (Synthetic preparation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis and use as liq. crystal in electrooptical display devices)

MSTR 1A

G1-G11-G20-G22
2-3-4-5

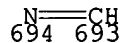
G7 = 246-1 243-238



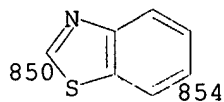
G8 = O

G9 = p-C6H4

G10 = 694-239 693-3



G11 = 850-2 854-4



MPL: claim 3

NTE: additional oxygen interruptions of perfluoroalkyl in G22 also claimed

ALL ANSWERS HAVE BEEN SCANNED

=> d his

(FILE 'HOME' ENTERED AT 09:33:16 ON 29 AUG 2002)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 09:33:22 ON 29 AUG 2002

L1 STR
L2 16 S L1
L3 SCR 2004 AND 1840
L4 10 S L1 AND L3
L5 195 S L1 AND L3 FUL
SAV TEMP L5 GERSTL923/A
L6 STR L1
L7 0 S L6 SAM SUB=L5
L8 8 S L6 FUL SUB=L5
SAV TEMP L8 GERSTL923A/A
L9 3 S L8 AND (C26H20N4O2S OR C31H23N5O3S2 OR C28H18N4OS4)
L10 5 S L8 NOT L9

FILE 'HCAOLD' ENTERED AT 09:38:51 ON 29 AUG 2002

L11 0 S L10

FILE 'HCAPLUS' ENTERED AT 09:38:54 ON 29 AUG 2002

L12 2 S L10

FILE 'USPATFULL, USPAT2' ENTERED AT 09:38:57 ON 29 AUG 2002

L13 1 S L10

FILE 'REGISTRY' ENTERED AT 09:39:14 ON 29 AUG 2002

FILE 'USPATFULL, USPAT2' ENTERED AT 09:39:28 ON 29 AUG 2002